

CLAIM LISTING

1. – 25. (Cancelled)

26. (New) A method for creating an artificial facet joint, comprising the steps of:

providing a spinal implant rod;

providing at least a fixation connector assembly and a sliding connector assembly,

each said connector assembly comprising a post and a connecting member having a rod

connecting portion and a post connecting portion, said sliding connector assembly having a rod

connecting portion with structure for slidable engagement of said rod, said fixation connector

assembly having a rod connecting portion with structure for engaging said rod so as to prevent

sliding movement of said rod relative to said connector assembly;

positioning and securing said post of said sliding connector assembly or said

fixation connector assembly in the area of the superior articular facet of a lower vertebrae, and

positioning and securing said post of the other of said sliding connector assembly or said fixation

connector assembly in the area of an inferior articular facet of an adjacent upper vertebrae; and,

securing said rod to said sliding connector assembly so as to be slidable relative

thereto postoperatively, and securing said rod to said fixation connector assembly so as to

prevent slidable movement relative thereto postoperatively.

27. (New) The method of claim 26, wherein a portion of said connecting member

pivots to permit pivoting of said rod about an axis transverse to a long axis of said post.

28. (New) The method of claim 27, wherein each rod connecting portion is pivotally engaged to said post connecting portion and said rod connecting portion and said rod pivot about an axis transverse to a long axis of said post.

29. (New) The method of claim 26, wherein said post connecting portion slides relative to said post along a long axis thereof.

30. (New) The method of claim 26, wherein the post comprises a screw portion, said securing step comprising screwing said screw portion into said vertebrae.

31. (New) The method of claim 26, wherein said connecting member pivots polyaxially relative to the rod.

32. (New) The method of claim 26, further comprising the step of increasing resistance to angulation as the degree of angulation increases.

33. (New) The method of claim 26, further comprising the step of securing a second sliding connector assembly, a second fixation connector assembly, and a second rod to an opposite lateral side of said vertebrae by positioning and securing said post of said second sliding connector assembly or said second fixation connector assembly in the area of the superior articular facet of a lower vertebrae, and positioning and securing said post of the other of said second sliding connector assembly or said second fixation connector assembly in the area of an inferior articular facet of an adjacent upper vertebrae; and,

securing said second rod to said sliding connector assembly so as to be slidable relative thereto postoperatively, and securing said second rod to said second fixation connector assembly so as to prevent slidable movement relative thereto postoperatively.

34. (New) The method of claim 33, further comprising the step of attaching a crosslinking member to and between said spinal rods.

35. (New) The method of claim 26, wherein said spinal rod is positioned so as to be substantially parallel to the spinal column.

36. (New) The method of claim 26, wherein said spinal rod articulates in the sagittal plane.

37. (New) The method of claim 26, wherein said rod is shaped to define a desired bending of the spine, such that bending of the spine causes sliding movement of the connector relative to said rod, and said rod guides said connector according to a path defined by said rod.

38. (New) The method of claim 26, wherein said connecting member is movable over the screw, and the screw is shaped to provide a path and guides the motion of the spine during bending of the spine.

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39. (New) A method for creating an artificial facet joint, comprising the steps of:

providing a first connector assembly and a second connector assembly;

positioning and securing said first connector assembly in the area of the superior articular facet of a lower vertebrae, and positioning and securing said second connector assembly in the area of an inferior articular facet of an adjacent upper vertebrae; and

providing spinal support structure, said spinal support structure being connected to and between said first connector assembly and said second connector assembly so as to permit relative movement between said first connector assembly and said second connector assembly, whereby postoperatively said adjacent vertebrae are supported by said spinal support structure and said adjacent vertebrae can move relative to one another.